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Endemic Nephropathy in Rumania - L P Smith

The deaths from endemic nephropathy in Erghevitza, Rumania, were recorded from 1958-1968. These were compared with the rainfall records at Turnu-Severin.

Disease Factor

Number of deaths in 1958 + Number in 1959 + $\frac{1}{2}$ Number in 1960, and similarly

Weather Factors

September, October & November rainfall totals in 1958(R)
and similar totals in 1957(Rp), and similarly for subsequent years.

Formula Deaths = 0.088R + 0.1Rp - 9.85

with multiple correlation of 0.89 and partial correlations of 0.84 on R and 0.87 on Rp.

Results

Years	R	Rp	Deaths	Estimated Deaths
1958-60	161	137	21.5	18.0
1959-61	254	161	28	28.6
1960-62	193	254	35	32.5
1961-63	212	193	30.5	28.1
1962-64	121	212	22	22.0
1963-65	148	121	17.5	15.3
1964-66	223	148	19.5	24.6
1965-67	89	223	17	20.3
1966-68	222	89	18	18.6

If an attempt is made to introduce the rainfall of the second previous year (i.e 1956 in the first entry), the following partials are obtained.

Deaths on rainfall two years previously	0.29	
one year previously	0.88	(ie on Rp)
year	0.85	(ie on R)

with a multiple correlation of 0.90

Any comments or suggestions on this paper should be referred to the author.

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Bracknell

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